

3. (Twice Amended) A DNA as set forth in claim 1 that codes for a protein having an amino acid sequence that has a sequence identity of 30% or more with an amino acid sequence as shown in any one of SEQ ID NOs: 2, 4, 6, 8 or 12, and has activity that transfers a glycoside to the 5 position of a flavonoid.

4. (Twice Amended) A DNA as set forth in claim 1 that codes for a protein having an amino acid sequence that has a sequence identity of 50% or more with an amino acid sequence as shown in any one of SEQ ID NOs: 2, 4, 6, 8 or 12, and has activity that transfers a glycoside to the 5 position of a flavonoid.

5. (Twice Amended) A DNA as set forth in claim 1 that codes for a protein, wherein said DNA hybridizes under conditions of 5 x SCC and 50°C with all or a portion of a nucleotide sequence that codes for an amino acid sequence as shown in any one of SEQ ID NOs: 2, 4, 6, 8 or 12, and has activity that transfers a glycoside to the 5 position of a flavonoid.

9. (Amended) A process for producing a protein comprising culturing a host as set forth in claim 7, and recovering a protein having activity that transfers a glycoside to the 5 position of a flavonoid from said host.

20. (Twice Amended) An isolated nucleic acid molecule comprising a sequence of nucleotides encoding a plant flavonoid-5-glucosyltransferase (5GT).

22. (Twice Amended) An isolated nucleic acid molecule according to claim 21, comprising a nucleotide sequence as set forth in SEQ ID NOs: 1, 3, 5, 7 or 11, or having at least 50% sequence identity thereto.

Please add new claims 25-42 as follows.

--25. (New) A DNA as set forth in claim 1, wherein the DNA is derived from *Anthophyta* or *Mangnoliophyta*.

26. (New) A DNA as set forth in claim 2, wherein the DNA is derived from *Anthophyta* or *Mangnoliophyta*.

27. (New) A DNA as set forth in claim 3, wherein the DNA is derived from *Anthophyta* or *Mangnoliophyta*.

28. (New) A DNA as set forth in claim 4, wherein the DNA is derived from *Anthophyta* or *Mangnoliophyta*.

29. (New) A DNA as set forth in claim 5, wherein the DNA is derived from *Anthophyta* or *Mangnoliophyta*.

30. (New) A DNA as set forth in claim 25, wherein the DNA is derived from *Dicotyledonopsida*.

31. (New) A DNA as set forth in claim 26, wherein the DNA is derived from *Dicotyledonopsida*.

32. (New) A DNA as set forth in claim 27, wherein the DNA is derived from *Dicotyledonopsida*.

33. (New) A DNA as set forth in claim 28, wherein the DNA is derived from *Dicotyledonopsida*.

34. (New) A DNA as set forth in claim 29, wherein the DNA is derived from *Dicotyledonopsida*.

35. (New) A DNA as set forth in claim 1, wherein the DNA belongs to the group of anthocyanin 5-glucosyltransferase on a phylogenetic relationship of glycosyltransferases.

36. (New) A DNA as set forth in claim 2, wherein the DNA belongs to the group of anthocyanin 5-glucosyltransferase on a phylogenetic relationship of glycosyltransferases.

37. (New) A DNA as set forth in claim 3, wherein the DNA belongs to the group of anthocyanin 5-glucosyltransferase on a phylogenetic relationship of glycosyltransferases.

38. (New) A DNA as set forth in claim 4, wherein the DNA belongs to the group of anthocyanin 5-glucosyltransferase on a phylogenetic relationship of glycosyltransferases.

39. (New) A DNA as set forth in claim 5, wherein the DNA belongs to the group of anthocyanin 5-glucosyltransferase on a phylogenetic relationship of glycosyltransferases.

40. (New) An isolated nucleic acid molecule comprising a sequence of nucleotides fully complementary to a sequence encoding a plant flavonoid-5-glucosyltransferase (5GT).

41. (New) An isolated nucleic acid molecule according to claim 40, wherein the plant is selected from the group consisting of Perilla, torenia, verbena and petunia.

42. (New) An isolated nucleic acid molecule according to claim 40, comprising a nucleotide sequence fully complementary to a nucleotide sequence as set forth in SEQ ID NOs: 1, 3, 5, 7 or 11, or having at least 50% sequence identity thereto.--